Commonwealth of Kentucky

Environmental and Public Protection Cabinet Department for Environmental Protection

Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

Final

AIR QUALITY PERMIT Issued under 401 KAR 52:030

Permittee Name: Trane

Mailing Address: 1500 Mercer Road, Lexington, KY 40511

Source Name: Trane

Mailing Address: 1500 Mercer Road

Lexington, KY 40511

Source Location: 1500 Mercer Road

Permit ID: F-07-007 Agency Interest #: 1100

Activity ID: APE20060001

Review Type: Renewal, Conditional Major, Construction /

Operating

Source ID: 21-067-00009

Regional Office: Frankfort Regional Office

643 Teton Trail, Suite B Frankfort, KY 40601

(502) 564-3358

County: Fayette

Application

Complete Date: February 17, 2007
Issuance Date: June 22, 2007

Revision Date:

Expiration Date: June 22, 2012

John S. Lyons, Director Division for Air Quality

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Rev#	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action
-	Renewal	APE20060001	02/17/2007	06/22/2007	Renewal

Version 1-29-2007

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency

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SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Point: 1 (06) Penthouse Climate Changer Paint Booth # 5:

Two (2) Spray Guns (one run at a time)

Description:

Spray Operation System: Air-Assisted Airless

Year of Installation: 1987

Maximum rate capacity: 16.67 gals/hr

Alcohol (70/30) wipes to clean products

The estimated transfer efficiency of the system: 70%

Control:

Filters (PM/PM10)

Estimated Control Efficiency: 90%

Emission Point: 02 (09) Penthouse Climate Changer Paint Booth #6:

Two (2) Spray Guns (one run at a time)

Description

Spray Operation System: Air-Assisted Airless

Year of Installation: 1998

Maximum rate capacity:: 16.67 gals/hr

Alcohol (70/30) wipes to clean products

The estimated transfer efficiency of the system: 70%

Control:

Filters (PM/PM10)

Estimated Control Efficiency: 90%

APPLICABLE REGULATIONS:

401 KAR 59:010, New Process Operations, applies to the particulate matter emissions from affect facilities constructed on or after July 2, 1975;

1. **Operating Limitations:**

The usage rate of materials used in affected facilities shall not exceed the emission limitations as described in Section B(2) below.

2. <u>Emission Limitations:</u>

(i) Standard for Opacity (401KAR 59:010, Sec (3)):

The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility (s) which is equal to or greater than twenty (20) percent opacity.

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SECTION B -EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

(ii) Standard for Particulate Matter (401 KAR 59:010 Section 3(2)):

For emission from a control device or stack, no person shall cause, suffer, allow or permit the emission in to the open air of particulate matter (PM) from any affected facility (s) which in excess of 2.34 lb/hr.

Compliance Demonstration Method:

The fabric filter system is to be maintained and operated in accordance with manufacturer's instruction, and is to be operated at all times spray booth is in operation. When the spray booths are operated in accordance with manufacturer's recommendations, compliance with the mass limit is assumed.

(iii) **VOC limitation (401 KAR 52:030)**

See Section D (3) (a)

3. <u>Testing Requirements:</u>

See Section D (4)

4. **Monitoring Requirements:**

- a See Section D (3).
- b. See Compliance Demonstration Method in Section B (2) (i).

5. Specific Record Keeping Requirements:

- a. The permittee shall keep calendar month records of the usage of each coating, solvent, thinner diluent, and clean up solvents or any other VOC containing material;
- b. At the end of each month volatile organic compound (VOC) emissions in tons shall be calculated and recorded.
- c. The annual emission for each calendar year shall be calculated and kept available at the plant site;
- d. The records listed above, as well as purchase orders and invoices for all VOC containing materials, shall be made available for inspection upon request by duly authorized representatives of the Division for Air Quality.

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SECTION B -EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Specific Reporting Requirements:

Reporting of the following shall be done on a semi annual-basis:

- a. Any deviations from requirements of section B shall be reported;
- b. The VOC content as applied in each adhesive, coating, or solvent, surface preparation, graphic arts material or solvent, cleanup, or washup solvent (including exempt compounds) used;
- c. The VOC emission for each month in the semi-annual period shall be reported;
- d. The rolling 12 month total for VOC during each month in the semi-annual period shall be reported;
- e. See Section F 5, 6, 7, and 8

7. Specific Control Equipment Operating Conditions:

None

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SECTION B -EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Points # 3 Boiler #1

Description:

750 Hp. Johnston Boiler

Primary Fuel: Natural Gas
Secondary Fuel: Fuel Oil #2
Maximum continuous rating: 31.36 MMBtu/hr

Construction commenced: 1990

Emission Points # 4: Boiler #2

Description:

300 Hp. Johnston Boiler

Primary Fuel: Natural Gas
Secondary Fuel: Fuel Oil #2
Maximum continuous rating: 12.54 MMBtu/hr

Construction commenced: 1990

Emission Points # 5: Boiler #3

Description:

400 Hp Bryan Boiler

Primary Fuel: Natural Gas
Secondary Fuel: Fuel Oil #2
Maximum continuous rating: 17.0 MMBtu/hr

Construction commenced: 1997

APPLICABLE REGULATIONS:

401 KAR 59:015, New Indirect Heat Exchangers applicable to an emission unit with a capacity less than 250 MMBtu/hour and commenced on or after April 9, 1972.

401 KAR 60:005, incorporating by reference 40 CFR 60 Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, applicable to an emission unit with a design maximum heat input capacity of 100 MMBtu/hr or less and greater than or equal to 10 MMBtu/hr and constructed after June 9, 1989.

Fuel Usage

- a. For fuel oil # 2, See Alternate Operating Scenarios Section H;
- b. For natural gas;

1. Operating Limitations:

- a. The usage rate of materials used in affected facilities shall not exceed the emission limitations as described in Section B(2).
- b. Pursuant to 401 KAR 60:005, incorporating by reference 40 CFR 60.43c (d), the PM and opacity standards apply at all times except during periods of startup, shutdown, or malfunction.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. <u>Emission Limitations</u>:

- a. Sulfur Dioxide emissions limitation (401 KAR 52:030)
 See section D (3) (b)
- b. Emissions from each affected facility shall not exceed the following;

Pollutants	Emission	Emission	Emission	Regulations
	Point # 3	Point # 4	Point # 5	
	(Boiler # 1)	(Boiler # 2	(Boiler # 3)	
Allowable PM	0.41	0.41	0.38	401 KAR 59:015
emissions				Section 4(1) (c):
(lb/MMBtu)				
Based on three-				
hour average				
Allowable SO ₂	1.63	1.63	1.42	401 KAR 59:015
emissions				Section 5 (c) 1
(lb/MMBtu)				
based on 24-hour				
average				
Allowable Opacity	20*	20*	20*	401 KAR 59:015
percent				Section 4(2)

^{*} Except for six consecutive minutes period per sixty (60) consecutive minutes of not more than forty (40) percent opacity during cleaning the fire box or blowing soot. 401 KAR 59:015 Section 4(2) (b)

Compliance Demonstration Method:

Affected facility is considered to be in compliance with the PM, SO₂, and opacity standards while burning natural gas.

3. <u>Testing Requirements:</u>

Testing shall be conducted at such times as may be required by the cabinet in accordance with Regulation 401 KAR 50:045 Section 3 to demonstrate continued compliance.

4. Specific Monitoring Requirements:

The permittee shall monitor natural gas combusted and hours of operations on a daily basis [40 CFR 60.48 (g)].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5 **Specific Record Keeping Requirements:**

- a. Pursuant to 401 KAR 60:005, incorporating by reference 40 CFR 60.48c (g) the permittee shall record and maintain records of the amounts of natural gas combusted during each day.
- b. Monthly calculations of sulfur dioxide emitted from the natural gas shall be calculated and recorded.
- c. At the end of each month Sulfur Dioxide (SO₂) emissions in tons shall be calculated and recorded.
- d. The annual emission for each calendar year shall be calculated and kept available at the plant site.
- e. Pursuant to 401 KAR 60:005, incorporating by reference 40 CFR 60.48c (i), all records required by 40 CFR 60 Subpart Dc shall be maintained by the permittee for a period of two years following the date of such record.

6. **Specific Reporting Requirements:**

Reporting of the following shall be done on a semi annual-basis:

- a. Any deviations from requirements of section B shall be reported;
- b. The Sulfur Dioxide (SO₂) for each month in the semi-annual period shall be reported;
- c. The rolling 12 month total for VOC during each month in the semi-annual period shall be reported;
- d. Calendar dates covered in the reporting period;
- e. Reasons for any noncompliance with the emission standards, and a description of corrective actions taken;
- f. See Section F 5, 6, 7, and

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SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<u>Description</u>	Generally Applicable Regulation
1.	Eight Fiberglass Cutting Operations	NA
2.	Eight Spray Adhesive Operations	NA
3.	Five Plasma Cutting Operations	NA
4.	Fuel Oil Storage (10,000 gallons)	NA
5.	MIG Welding Activities	401 KAR 59:010
6.	Miscellaneous Coating Operations Utilizing Aerosols	401 KAR 59:010
7.	Miscellaneous metal forming operations utilizing vanishing oils as metal working fluids	NA
8.	Polyurethane Insulation Spray Booth	NA
9.	Polyurethane Packing Foam Operation	NA
10.	Spot Welding Activities	401 KAR 59:010
11.	Three Maintenance Parts Washers	401 KAR 59:010
12.	Two roof top gas firing units (0.16 mmBTU/hr, 0.12 mmBTH/hr)	
13.	Weld coating Operations	401 KAR 59:010
14.	Wood Crate Construction Activities	401 KAR 59:010
15	Polyurethane Foam Cavity Filling Operation proposed in spring 2007	NA
16.	Air Conditioning Units (18)	None
17.	Manual Brush Painting	401 KAR 59:010

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 1. As required by Section 1b of the material incorporated by reference in 401 KAR 52:030 Section 10, compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
- 2. VOC and SO₂ emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

3. **Emission Limitations:**

a. **Standard for VOC:**

The source has accepted a facility-wide limit on annual VOC emissions of no more than 50.0 tons including insignificant activities, burning of natural gas, and fuel oil. These emissions shall be calculated based on 12-month rolling period. The following equations may be used.

Compliance Demonstration Method:

Monthly VOC emission = ∑[Monthly usage of each coating, solvent, thinner diluent, or any other VOC containing material in pounds or gallons per month] x [VOC fraction] x [appropriate conversion factor (if usage is in gallons) for gallons to pounds for each coating, solvent thinner, diluent, or any other VOC containing material used]

Monthly VOC emission = Monthly usage of Natural Gas X Emission factor from most current AP-42

Monthly VOC emission = Monthly usage of fuel oil X Emission factor from most current AP-42

b. Standard for SO_2 :

The source has accepted a facility-wide limit on annual SO_2 emissions of no more than 25.0 tons. These emissions shall be calculated based on 12-month rolling period.

The following equation may be used.

Compliance Demonstration Method:

Monthly SO₂ emissions = [(Monthly gas or fuel oil consumption x Emission factor from most current AP-42.)]

4. **Testing Requirements:**

Testing shall be conducted at such times as may be required by the cabinet in accordance with Regulation 401 KAR 50:045 Section 3 to demonstrate continued compliance.

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SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place (as defined in this permit), and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030 Section 3(1)(f)1a and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- 3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- 9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - a. Identification of each term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality
Frankfort Regional Office
643 Teton Trail, Suite B
Frankfort, KY 40601

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

Frankfort, KY 40601

- 10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.
- 11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
 - a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
 - (1) The size and location of both the original and replacement units; and
 - (2) Any resulting change in emissions;
 - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
 - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
 - d. The replacement unit shall comply with all applicable requirements; and
 - e. The source shall notify Regional office of all shutdowns and start-ups.
 - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
 - (1) Re-install the original unit and remove or dismantle the replacement unit; or
 - (2) Submit an application to permit the replacement unit as a permanent change.

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SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
 - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].

- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-12-b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
- 1. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

- q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in this permit; and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].
- b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

3. Permit Revisions

- a. Minor permit revision procedures specified in 401 KAR 52:030 Section 14(3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

Polyurethane Foam Cavity Filling Operation (Page 8 of 24, Insignificant activity New in spring 2007

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, in accordance with the terms and conditions of this permit.

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - (1) The date when construction commenced.
 - (2) The date of start-up of the affected facilities listed in this permit.
 - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:030, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the draft permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- e. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

5. <u>Testing Requirements</u>

a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

(5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

- b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

8. Ozone depleting substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515

Lanham-Seabrook, MD 20703-1515.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

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SECTION H - ALTERNATE OPERATING SCENARIOS

Emission Points # 3 Boiler #1

Description:

750 Hp. Johnston Boiler

Primary Fuel: Natural Gas
Secondary Fuel: Fuel Oil #2
Maximum continuous rating: 31.36 MMBtu/hr

Construction commenced: 1990

Emission Points # 4: Boiler #2

Description:

300 Hp. Johnston Boiler

Primary Fuel: Natural Gas
Secondary Fuel: Fuel Oil #2
Maximum continuous rating: 12.54 MMBtu/hr

Construction commenced: 1990

Emission Points # 5: Boiler #3

Description:

400 Hp Bryan Boiler

Primary Fuel: Natural Gas
Secondary Fuel: Fuel Oil #2
Maximum continuous rating: 17.0 MMBtu/hr

Construction commenced: 1997

APPLICABLE REGULATIONS:

401 KAR 59:015, New Indirect Heat Exchangers applicable to an emission unit with a capacity less than 250 MMBtu/hour and commenced on or after April 9, 1972;

401 KAR 60:005, incorporating by reference 40 CFR 60 Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, applicable to an emission unit with a design maximum heat input capacity of 100 MMBtu/hr or less and greater than or equal to 10 MMBtu/hr and constructed after June 9, 1989.

For fuel oil combustion:

1. Operating Limitations:

- a. The usage rate of materials used in affected facilities shall not exceed the emission limitations as described in Section B(2);
- b. Pursuant to 401 KAR 60:005, incorporating by reference 40 CFR 60.43c (d), the PM and opacity standards apply at all times except during periods of startup, shutdown, or malfunction.

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SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

2. <u>Emission Limitations</u>:

a. Sulfur Dioxide emissions limitation (401 KAR 52:030) See section D (3) (b)

b. Emissions from each affected facility shall not exceed the following;

Pollutants	Emission Point # 3 (Boiler # 1)	Emission Point # 4 (Boiler # 2	Emission Point # 5 (Boiler # 3)	Regulations
Allowable PM emissions (lb/MMBtu) Based on three- hour average	0.41	0.41	0.38	401 KAR 59:015 Section 4(1) (c):
Allowable SO ₂ emissions (lb/MMBtu) based on 24-hour average	0.5	0.5	0.5	40CFR 60 Subpart Dc, 60.42 c (d)
Allowable Opacity percent	20*	20**	20**	401 KAR 59:015 Section 4(2)

^{*} Except for one six minutes period per sixty (60) minutes of not more than twenty-seven (27) percent opacity, 40 CFR 60 Subpart Dc, Section 60.43 c (c);

Compliance Demonstration Method:

Affected facility is considered to be in compliance with the PM, SO₂, and opacity standards if the fuel oil used has a sulfur content less than or equal to 0.5% by weight. If fuel oil of over 0.5% sulfur is used, the Division shall be notified immediately and a compliance demonstration will be required per testing requirement listed in Section 3 (c).

3. Testing Requirements:

- a. Pursuant to 401 KAR 50:045, in determining compliance with the visible emission (opacity) standard, the owner or operator shall use Reference Method 9;
- b. Pursuant to 401 KAR 60:005, incorporating by reference 40 CFR 60.44c (h), for fuel oil only, where the permittee seeks to demonstrate compliance with the sulfur dioxide standards based on fuel supplier certification, the initial compliance demonstration shall consist of the certification, this being the certification from the fuel supplier as described under 40 CFR 60.48c (f)(1);

^{**} Except for six consecutive minutes period per sixty (60) consecutive minutes of not more than forty (40) percent opacity during cleaning the fire box or blowing soot 401 KAR 59:015 Section 4(2) (b).

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SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

c. Pursuant to 401 KAR 60:005, incorporating by reference 40 CFR 60.44c (g), where permittee seeks to demonstrate compliance with the fuel oil sulfur limits based on shipment fuel sampling, the initial compliance demonstration shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in each emission unit to demonstrate that the oil contains 0.5 weight percent sulfur or less.

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor fuel oil combusted and hours of each operations on a daily basis [40 CFR 60.48 (g)];
- b. The permittee shall monitor the heating value and sulfur content of each type of fuel oil combusted whenever a new shipment of fuel oil is received. The permittee may use certifications from fuel suppliers to satisfy this requirement.

Specific Record Keeping Requirements:

- a. Pursuant to 401 KAR 60:005, incorporating by reference 40 CFR 60.48c (g) the permittee shall record and maintain records of the amounts of fuel oil combusted during each day;
- b. Monthly calculations of sulfur dioxide emitted from the fuel oil shall be calculated and recorded;.
- c. Records of fuel oil burned shall include an analysis of sulfur content;
- d. Records of fuel supplier certification;
- e. Records shall be retained for a period of five years;
- f. At the end of each month Sulfur Dioxide (SO₂) emissions in tons shall be calculated and recorded:
- g. The annual emission for each calendar year shall be calculated and kept available at the plant site;
- h. Pursuant to 401 KAR 60:005, incorporating by reference 40 CFR 60.48c (i), all records required by 40 CFR 60 Subpart Dc shall be maintained by the permittee for a period of two years following the date of such record.

6. Specific Reporting Requirements:

The owner or operator of the facilities shall sign and submit a report of the test semiannually, a report containing:

- a. The name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Material in ASTM D396-78, Standard Specification for Fuel Oils;
- b. A statement that the fuel supplier certifications represent all fuel combusted during the quarter;
- c. Calendar dates covered in the reporting period;
- d. Reasons for any noncompliance with the emission standards, and a description of corrective actions taken;

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SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

e. Any deviations from requirements of section B shall be reported;

- f. The Sulfur Dioxide (SO₂) emission for each month in the semi-annual period shall be reported;
- g. The rolling 12 month total for Sulfur Dioxide (SO₂) during each month in the semi-annual period shall be reported;
- h. See Section F 5, 6, 7, and 8.

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SECTION I - COMPLIANCE SCHEDULE

None